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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,558	08/25/2003	Arthur G. Wilson	78302 (P1663)	3226
27975	7590	06/23/2005	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			SOHN, SEUNG C	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/647,558	Applicant(s) WILSON ET AL.	
	Examiner Seung C. Sohn	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>304</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because **numerous block diagrams (5, 10, 23, 24, 50, 58, 62) in Fig. 1 should be labeled**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the package for**

**housing electronic and optical components in claim 1** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 4 and 6 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4 and 6 recite the limitation "the laser package" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broutin et al. (Patent No. US 6,697,388) in view of Broutin et al. (Patent No. US 6,243,403).**

Regarding claims 1-3 and 9-11, Broutin et al. ('388) shows in Fig. 1 the following elements of Applicant's claim: a) a light source (110) disposed within the package for providing the output signal; b) a photodetector (136 or 142) disposed within the package in close proximity to the light source, wherein at least a portion of the output signal is optically coupled to the photodetector (Col. 3, lines 25-45); c) switching means (160, i.e., controller) for changing a bias on the photodetector between forward bias mode (176) and reverse bias mode (178), whereby the photodetector provides an indication of the output power of the light source output signal when the photodetector is in the reverse bias mode, and a signal that is related to the temperature of the light source when the photodetector is in the forward bias mode (Col. 4, lines 1-9); d) a feedback circuit (154, i.e., laser current supply) utilizing the indication of the output power from the photodetector to send a feedback signal to adjust the output power of the light source (Col. 4, lines 1-9); and e) a look-up table (memory in the controller, 160) comprising a plurality of stored values, said stored values corresponding to control voltages for adjusting the feedback signal and maintaining the wavelength of the light source substantially constant at the wavelength  $\lambda_s$  when the power of the light source changes and/or when the temperature about the light source changes (Col. 4, lines 10-25). Broutin et al. ('388) does not

disclose a hermetically sealed package for housing electronic and optical components. Broutin et al. ('403) shows in Fig. 1 a hermetically sealed package (101) for housing electronic (177) and optical (e.g., 170, 180, 190) components (Col. 5, lines 31-38). It would have been obvious to a person ordinary skill in the art to provide a hermetically sealed package for housing electronic and optical components of Broutin et al. ('403) in the device of Broutin et al. ('388) for the purpose of protecting various components.

**Regarding claim 4**, Broutin et al. shows in Fig. 1 a thermoelectric cooler (TEC) (124) for varying the temperature of the laser package in dependence upon a TEC control signal (176), which is based on the signal related to the temperature of the light source.

**Regarding claim 5**, Broutin et al. discloses that the TEC control signal is derived from at least a stored test value within the lookup table (memory in controller), and the signal related to the temperature of the light source.

**Regarding claim 6**, Broutin et al. discloses that the stored test value is selected in dependence upon an ambient temperature outside the laser package.

**Regarding claim 7**, Broutin et al. discloses that the stored test value is converted to a voltage, and said voltage is compared with the signal related to the temperature of the light source to produce a difference signal for provision to the TEC for the control thereof.

**Regarding claim 8**, Broutin et al. discloses that the photodiode (136 or 142) is configured to receive light from the light source (110) during a forward biased mode of operation.

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bielas (Patent No. US 6,359,918) discloses a light source controller having a look-up table.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung C. Sohn whose telephone number is (571) 272-2446. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seung C. Sohn  
Examiner  
Art Unit 2878

